

2 / 6

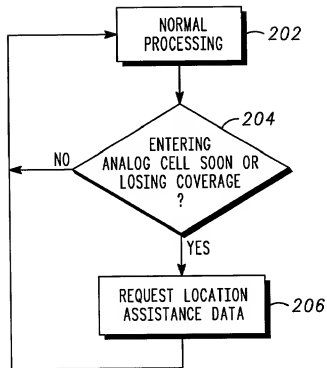


FIG. 2

3 / 6

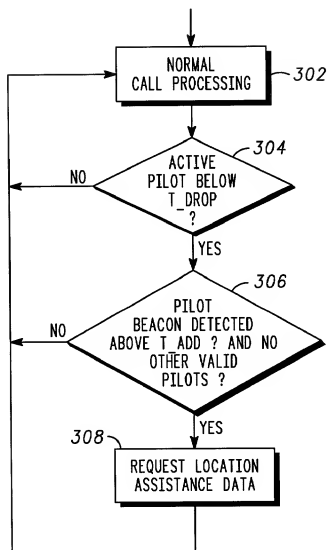


FIG. 3

4 / 6

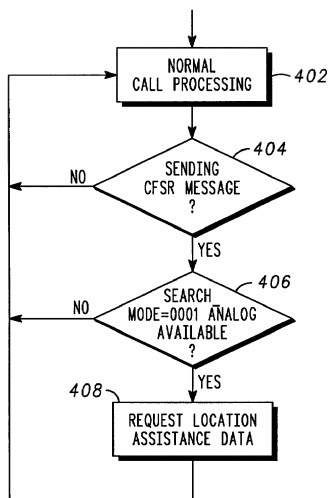


FIG. 4

5 / 6

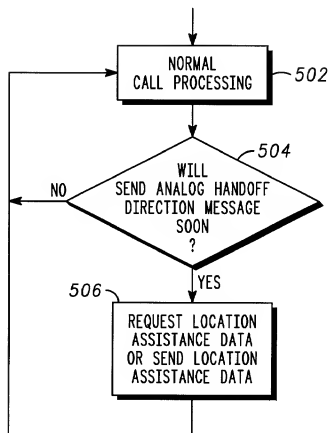


FIG. 5

The block diagram illustrates the internal architecture of a portable electronic device 600. The central component is a MICROPROCESSOR, which is connected to several peripheral units:

- Input/Output and Control:** The MICROPROCESSOR is connected to a KEYPAD 615, a DISPLAY 616, and an I/O 616 interface.
- Storage:** It is connected to a set of memory components including ROM 609, EEPROM 607, and RAM 605.
- Communication and Data:** The MICROPROCESSOR is connected to a MESSAGE RECEIVER AND STORAGE DEVICE 601, a FRAME GENERATOR 601, and a TRANSMITTER 623. The TRANSMITTER 623 is connected to an external antenna 629.
- Navigation and Timing:** The MICROPROCESSOR is connected to a SYNTHESIZER 625 and a RECEIVER 627. The RECEIVER 627 is connected to an external antenna 632. The SYNTHESIZER 625 is connected to a CLOCK GENERATOR 638.
- GPS Functionality:** The MICROPROCESSOR is connected to a GPS DOWN CONVERT 634 and a GPS BASE BAND PROCESSOR CORRELATOR 640. The GPS DOWN CONVERT 634 is connected to an external antenna 632. The GPS BASE BAND PROCESSOR CORRELATOR 640 is connected to an A/D converter 636, which is also connected to the MICROPROCESSOR.

The entire system is enclosed within a dashed boundary 600, with various components and their interconnections labeled with reference numerals.